

Public Comments re. Landslides

The North Coast Basin Coalition:

Oregon must increase protection of high-risk landslide areas. Our community watersheds experience landslides from failed logging roads. In 2013 the drinking watershed of Arch Cape alone experienced four (4) landslides from private logging roads. These slides inevitably fill our streams with sediment. Oregon does not have a program to prevent such slides.

Ex. 6 - Personal Privacy

The areas where there need to be program improvements that would actually work to control polluted runoff from logging would be protection of high-risk landslide areas from cuts.

Oceanside Clean Water Subcommittee

Landslides....push debris into the watersheds resulting in increased chlorine and carcinogens in treated water.

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Last year I participated in steelhead spawning surveys on the Salmonberry River in Oregon's coast range. I saw the results of poorly planned logging roads on steep slopes where whole hillsides had slid down into the creek below after heavy winter rains.

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Concerned with logging impacts, particularly from clearcutting and resultant hillside erosion, which may pollute our drinking water spring. We had severe clearcutting around our private forest and this caused substantial loss of river quality.

Umpqua Watersheds, Inc

Inspected recent road failure: The down hill shoulder of this mid-slope sited road had broken away in several locations, due to fill slope failure. Mud and debris flows, some recent, were much in evidence, their effect on the watershed some two or three hundred feet below, clearly discernible. This

phenomenon, obviously the result of heavy rain fall on deforested and very steep slopes, has repeated itself with regularity over the years I have been roaming these hills.

Audubon Society of Portland

The logging of unstable slopes and Type N stream created polluted runoff

Northwest Environmental Advocates

NEW Comment 57-I.2 After evaluating impacts to small headwater streams, after evaluating the Oregon forest practices rules' effectiveness at preventing landslides, debris flows, and resulting water quality impairments, and after evaluating the Oregon forest practices rules governing applications of forest chemicals, Dr. Frissell concluded that Oregon's rules fail to ensure the attainment and maintenance of Oregon's water quality standards, including full support of its designated beneficial uses. (Frissell Declaration at 35-37, 48-51, and 51-55.)

Comment 57-K.1 Many landslides in clearcut units occur adjacent to streams and incipient drainages loaded with slash debris.(Gresswell et al. 1979.)

Comment 57-K.2 Logging high-risk sites also significantly increases the risk of landslides and debris flows.

Comment 57-K.2 Clearcut areas are more prone to slope failure than forested areas. (Gresswell et al. 1979, Pentec 1991, Benda et al. 1998, Robison et al. 1999, Montgomery et al. 2000, Guthrie 2002, May 2002.)

Comment 57-K.3 Landslides in clearcuts are more likely to deliver to streams, and to impair water quality with episodic and chronic sedimentation, than landslides in forested areas (Johnson et al. 2000; Guthrie 2002; Benda et al. 1998.)

Comment 57-K.4 Sediment delivery to streams via mass wasting events drastically alters aquatic habitat (Spence et al. 1996.)

Comment 57-K.5 Debris flows elevate turbidity downstream and negatively affect aquatic species. (Cederholm & Lestelle, 1974: xiii.)

Comment 57-K.7 Increases in sediment delivery can further harm coho by contributing to increases in width/depth ratios in sensitive streams (Richards, 1982; Rhodes et al., 1994.)

Comment 57-K.7 Increases in width/depth ratios in sensitive streams,30 which inevitably increases summer water temperatures even in the absence of the loss of shade. (Beschta et al., 1987; McCullough, 1999.)

Comment 57-N (roads) Much forestry-related sediment is delivered episodically via stormwater runoff or road-related landslides.

Comment 57-P (roads) Although Oregon imposes additional forest practices regulations where construction of a forest road on a high landslide hazard location would threaten public safety, it imposes no additional restrictions where a similarly situated road would threaten water quality or Oregon coast coho.

Comment 57-Q (roads) Operators might do everything they can to properly locate a road and “minimize the risk” to waters of the state, but the road might still be in a location where it is 60 percent or more likely to slide into a stream and cause water quality violations. The regulatory language demonstrates that Oregon’s road location rule does not require operators to eliminate or avoid water quality problems; rather, it simply requires them to minimize risk.

NEW Comment 57-Q.1 Oregon’s road rules are rife with obligations to “minimize” risks or impacts. (“Operators shall design cut and fill slopes to minimize the risk of landslides.”) minimizing risks from forest roads simply does not equate to eliminating adverse water quality impacts from forest roads. The road location rule requires operators to “avoid locating roads on steep slopes, slide areas, high landslide hazard locations” and in other high-risk areas “where viable alternatives exist.” Along with suggesting that locating roads in those areas clearly poses risks to Oregon streams, this rule also suggests that where someone determines that viable alternatives do not exist, an operator can with impunity go ahead and locate a road on a steep slope in an area likely to generate a landslide that adversely impacts a stream. Here again the rule does not prevent building of the road in a high-risk landslide area, it simply requires someone to conclude that no other viable alternative exists before they do so.

Comment 57-S (roads) Logging roads are a very significant source of landslides that can and often do impair water quality (Gucinski et al., 2001; Sidle and Ochai (2006).

NEW Comment 57-V.1 Regarding landslides, management of Oregon state forests in the coastal watersheds do not protect water quality and designated beneficial uses. (Frissell Declaration at 50-51 ¶ 87)

NEW Comment 57-W.1 The “Northwest State Forests Management Plan,” (“FMP”) recognizes the risk of landslides, debris flows, and other slope stability issues in the Tillamook and Clatsop forests. The plan calls for analysis of the risk of landslides and depending upon the classification – low, moderate, or high – provides for varying levels of review and modification of the proposed activity (ODF FMP, 2010: 4-73). But these goals often are not attained, logging and road building continue in landslide prone areas, and the road system continues to contribute sediment to fish bearing streams either through hydrological connections, mass wasting events, or both.

NEW Comment 57-NN.1 Oregon’s Independent Multidisciplinary Science Team (IMST) reports together have concluded, inter alia, that sedimentation has been highly altered including by roads and landslides. (Recovery of Wild Salmonids in Western Oregon Forests: Oregon Forest Practices Act Rules and the Measures in the Oregon Plan for Salmon and Watersheds, Technical Report 1999-1 (Sept. 8, 1999) Recovery of Wild Salmonids in Western Oregon Lowlands, Technical Report 2002-1 (July 15, 2002); Oregon’s Water Temperature Standard and its Application: Causes, Consequences, and Controversies Associated with Stream Temperature, Technical Report 2004-1 (2004))

Comment 57-W (roads) IMST found that “[r]oads and landslides increase the amount of fine sediment in streams, but do not always add the more coarse elements,” concluding that the scientific basis for managing sedimentation from roads and landslides was difficult but “the concepts are known and provide a basis for reasonable conjecture on how to proceed.” IMST Forestry Report at 2. For this reason, the IMST noted a major shift in policy was needed to “bring[] roads not constructed to current standards and other hazardous settings in critical locations into compliance with current standards.” Id.

NEW Comment 57-NN.2 IMST has long agreed with EPA and NOAA that high risk logging roads and high risk landslide areas are a significant problem that must be addressed. (IMST Forestry Report at 2.)

NEW Comment 57-NN.3 IMST proposed two recommendations to address sedimentation from landslides: Recommendation 13. Retain trees on “high risk slopes” and in likely debris torrent tracks to increase the likelihood that large wood will be transported to streams when landslides and debris torrents occur. Recommendation 14. Continue to apply the current best management practices (BMP) approach to the management of forest lands with significant landslide potential, and develop a better case history basis for evaluating the effectiveness of BMP in this area. (Id. at 5.)

NEW Comment 57-NN.4 Current BMPs for forest lands with significant landslide potential are currently applied only to areas where roads and human habitation is at risk, not streams and designated uses.

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